GECF lecture focuses on climate change impact on environment

Doha

The Gas Exporting Countries Forum's (GECF) Monthly Gas Lecture in Doha focused on climate change and was led by two experts from Unesco and Qatar University.

The lecture held at the forum's headquarters was a result of the collaboration between Unesco's local office and Qatar University.

In his introduction, GECF secretary-general Dr Yury Sentyurin said, "It is not because we are in this industry that we are not focused on the environment. Quite the contrary. Natural gas is the cleanest fossil fuel and contrary to what some people's perception is, one of the safest fuels overall. Compared to other fossil fuels, natural gas releases the lowest amount of carbon dioxide into the air after combustion, in fact, 50% less than coal and 20%-30% less than oil."

“We consider it as our duty to act within the limits of our authority to reverse the consequences of climate change,” Sentyurin added.

Donia Abdelwahed, programme assistant (Science) at the Unesco Cluster Office for GCC and Yemen provided an introduction on Unesco’s work in the field of natural resources management and response to climate change.

Donia said, “We are all to a certain extent responsible for climate change and its impact on the environment. As a society we are all jointly suffering its consequences too.”

She pointed out that “it is part of Unesco’s role to urge stakeholders to strike a balance between development and preservation so that future generations can enjoy the same things we have been able to.”

In the light of their work towards achieving the UN’s Sustainable Development goals, an objective shared by the GECF, Unesco’s Qatar office is collaborating with Qatar University on preservation of the coral reef ecosystem in Qatar.

In line with this, the second part of the lecture was done by Dr Radouan Ben-Hamadou, associate professor (Marine Science) and head, Department of Biological and Environmental Sciences at Qatar University.

The lecture entitled “The use of decommissioned oil and gas platforms for the restoration of the coral reef ecosystem in Qatar” was introduced by Donia.

Ben-Hamadou’s presentation explored the feasibility of the ‘rigs-to-reefs’ concept in Qatar, which turns decommissioned oil and gas platforms into artificial reefs.

He said that even though corals can adapt to extreme environments, they have “reached a breaking point” and are

“dying at a rapid rate”.

But he also mentioned that before any changes can be suggested, they need to understand the working of the ecosystem.

This is why they have been working for several years in collaboration with all stakeholders, including industry, to see how man-made structures can be turned from a threat into an opportunity.

Great strides have been made in the process and the opportunity could be a win-win situation for all parties involved, as the rigs-to-reef project will not only restore the ecosystem but could also provide significant savings on decommissioning costs for oil and gas companies.

GECF said, “Considering the forum represents 19 gas producing and exporting countries, jointly covering 70% of the proven global gas reserves, this research is clearly relevant to the GECF. Therefore, in his closing remarks, Sentyurin expressed his support of the initiative and his desire to enhance the Secretariat’s collaboration with Unesco’s Doha office.”

Chevron set to buy Anadarko for $33bn in shale, LNG push

Chevron Corp yesterday said it will buy oil and gas producer Anadarko Petroleum Corp for $33bn in cash and stock in a deal that doubles down on its bet on US shale and propels the company into the ranks of the world's "supermajor" crude producers. The deal makes Chevron the sec- ond-largest major by crude produc- tion, behind Exxon Mobil Corp, up from fourth. It expands Chevron's role in two areas where US energy output is surging — shale from the Permian Ba- sin of west Texas and New Mexico, and liquefi ed natural gas (LNG) — which have helped make the US one of the world's largest energy exporters. "Chevron now joins the ranks of the UltraMajors — and the big three be- comes the big four," said Roy Martin, senior analyst at consultants Wood Mackenzie. "The acquisition makes the majors' peer group much more polar- ised. ExxonMobil, Chevron, Shell and BP are now in a league of their own."

US crude production stands at a record 12mn barrels a day (bpd), and the nation is the third-largest producer of LNG, the super-cooled fuel that is see- ing record demand as a cheaper, cleaner alternative for countries that still rely heavily on coal for power generation. Chevron's pledge to restrain expendi- tures has make it a favourite among en- ergy

stocks, with its shares up 13.8% this year. It plans to sell some $15bn in assets over time to off set the Anadarko deal. Still, investors sent Chevron shares down 5.2% to $119.44 yesterday. Chev- ron chief executive Mike Wirth called the deal a “great fi t” for the company. “This is really about creating share- holder value,” Wirth said in an inter- view. “It’s a great combination.

That’s what drives this.” The deal is the oil industry’s largest since Royal Dutch Shell bought BG Group in 2016, and it sparked speculation that other shale producers are in play. Shares of Apache Corp, which also has extensive acreage in the Permian Basin, rose 1.8%, while Pioneer Natu- ral Resources Co jumped 9%. With oil prices surging this year, Chevron and larger rival ExxonMobil have been in- creasing investment in the Permian Basin, the most prolifi c shale oil fi eld in the country. Their eff orts coincide with a pull- back by the smaller companies that revolutionised the industry through advances in horizontal drilling and hydraulic fracking. They have had to curtail spending due to investor dissat- isfaction with weak returns. Chevron, which already has 2.3mn acres in the Permian Basin, said the Anadarko deal would give the com- bined company a 75-mile (120-km)- wide corridor across the Permian’s Delaware basin, on the Texas-New Mexico border. “We will now see Chevron emerging as the clear leader among all Permian players, both in terms of production growth and as a cost leader,” said Rys- tad Energy head of analysis Per Magnus Nysveen, noting that Anadarko’s acre- age is in the “sweetest spot” of the Per- mian’s Delaware Basin. Anadarko also has a Mozambique LNG project, part of one of the indus- try’s largest planned current invest- ments, which Wirth said he still ex- pects to move to fi nal approval “sooner rather than later” this year.

Expenses from that project are ex- pected to reach $4bn over several years. The tie-up with Anadarko adds to Chevron’s deepwater investments in the Gulf of Mexico and gives it a

stake in growing oil and gas production in the US Rocky Mountains in Colorado. At the end of 2018, Exxon and Chev- ron accounted for about one-fi fth of Permian output, where produc- ers pump around 4mn barrels per day (bpd) currently. IHS Markit expects it to hit 5.4mn bpd in 2023, more than the total pro- duction of any Opec country other than Saudi Arabia. “It will be a continuous shift toward larger companies in basically all seg- ments of the shale industry,” said Ar- tem Abramov, head of shale research for Rystad Energy. Shares of Anadarko surged 32% yes- terday morning, refl ecting the 39% premium off ered by Chevron compared to Thursday’s closing market price. The $65 per share off er was struc- tured as 75% stock and 25% cash. The deal includes taking on $15bn of Anadarko’s debt.

Climbing Oil Prices Put India’s Benign Inflation Outlook at Risk

A rebound in oil prices poses a risk to India’s benign inflation expectations that last week allowed the central bank to deliver its second rate cut of 2019.

With crude at a five-month high, many investors are turning less confident about the Reserve Bank of India’s pace of monetary easing, though a slowdown in economic growth and subdued inflation still support an easing bias.

The low headline print gave Governor Shaktikanta Das and the rate-setting panel the space to cut rates by 25 basis points each in February and April to support the economy. Some economists see room for one more reduction provided food and fuel costs don’t spike. Data on Friday showed headline inflation quickened to a five-month high of 2.86 percent in March from 2.57 percent in February.

The RBI last week cut its inflation forecast to a range of 2.9 percent to 3 percent in the April-September period, compared with a February projection of 3.2 percent to 3.4 percent, while seeing price growth this year within its 4 percent

medium-term target. It separately cut economic growth forecast to 7.2 percent for the year that began on April 1, down from 7.4 percent previously.

“The recent rise in crude prices, if sustained,” could pose a challenge to both economic growth and inflation outlook, said Dharmakirti Joshi, chief economist with Crisil Ltd. in Mumbai.

Forecast for Brent, the benchmark for half the world’s oil, has been lifted on the back of production cuts, and the RBI sees prices being pushed up further should the U.S.-China trade tensions be resolved swiftly. The two sides are nearing a trade deal, with talks aimed at clinching one within the next month continuing.

A recent study by the central bank showed a $10 rise from $65 a barrel will lead to a 49 basis points increase in headline inflation, while a similar increase from $55 a barrel would give around a 58 basis-point boost to consumer prices.

Oil’s charge higher has also offset any gains from a rising currency on imported inflation. The rupee climbed 2.3 percent against the dollar in March, making it the best performer in Asia. The currency is up more than 7 percent from its October low, leading to a view among economists like Kotak Mahindra Bank Ltd. Economist Upasna Bhardwaj that some of the impact from the rising currency could help ease inflation.

A 2018 working paper, co-authored by Monetary Policy Committee member Michael Patra, showed that a 1 percent change in the exchange rate translates into a 15 basis-point move in headline inflation over a period of five months.

“We see room for 25 basis points of rate in 2019 given the benign near term headline trajectory,” Bhardwaj said. “Nonetheless, the trajectory on crude oil price increase needs to be watched closely.”

Still, others see the rupee’s role being countered by oil.

“It appears on balance that the recent hardening of oil prices would have negated the impact of rupee appreciation to a large extent,” said Gaurav Kapur, chief economist at IndusInd Bank Ltd. in Mumbai.

Oil’s big reset: Energy majors learn to thrive after price crash

Bloomberg/London

When Opec started an oil-price war in late 2014, most people believed US shale was doomed. In reality, the giant oil majors suffered most — burdened by expensive mega-projects, Chevron Corp, BP Plc and the rest struggled to adapt to the fall in energy prices.

Slowly, those companies figured out how to survive in the lower-for-longer price era. They cut costs and, more

importantly, learned how to stop them from rising again. In an industry that favoured tailored solutions for every project, companies started to talk about standardisation. At closed-door sessions in Davos, Switzerland, Big Oil bosses didn't waste time on self-important talk, but instead discussed how to share the design of anything from underwater valves to pumps.

Nearly five years after the crash, the cultural change is starting to work. The world's major energy companies have managed to press the reset button, allowing them to make profits today similar to what they did in a world of $100-plus a barrel oil prices.

"Big Oil has been able to re-emerge from this downturn stronger and lower on the cost curve," said Michele Della Vigna, the top oil industry analyst at Goldman Sachs Group Inc, who had been a critic of the majors.

The level of spending at the world's eight largest integrated oil and gas companies fell last year to $118bn, down 45% from a pre-crisis peak of $215bn in 2013, according to data compiled by Bloomberg News.

But their business model has changed a lot in the process. The reliance on multibillion dollar projects in far-flung corners of the world has been reduced and the majors are pouring billion into Texas's Permian Basin, once dominated by independent exploration and production companies. Other strategies include trying to build new projects closer to existing ones and reusing old infrastructure to reduce costs. They've also re-discovered the joys of integration, investing in refineries and petrochemical plants that make money even when prices are low.

To the surprise of many in the industry, lower costs haven't translated into slower development. In fact, projects have often come ahead of expectations.

The industry got a lot of help from its suppliers. According to Exxon Mobil Corp, the cost of 3D seismic technology, used to find underground reservoirs, and the deep-water rigs needed to exploit them has fallen more than 50% from the 2013 level.

The new era means combining projects that pay back quickly, whether in US shale or elsewhere, with some traditional larger projects. In the oil industry, it's a model called short-and-long oil cycle, because some projects pay back in as little to two-to-three years, compared to as long as 10 years for conventional projects.

"Big Oil now wants a diversified portfolio with short-and-long cycle oil," said Daniel Yergin, the oil historian that this week hosts the annual CERAWeek energy conference in Houston. "Before the oil crisis in 2014-15, the mere concept of short-cycle oil didn't exist in Big Oil."

Short-cycle oil has a one big advantage over mega-projects: companies can dial them up and down quickly to respond to changes in oil and gas prices.

The other significant change is natural gas. Big Oil had already embraced gas before the crisis, with companies like Exxon investing in massive projects in Qatar. But today some executives suggest gas is gaining the upper hand. "Gas is the fastest growing hydrocarbon," said Bernard Looney, chief executive for upstream at BP. "It's the future."

Despite the significant reduction in spending and much lower energy prices, returns haven't suffered, according to data complied by Bloomberg. The biggest oil companies posted return-on-capital-employed – a traditional yardstick used by investors – of about 8.7% last year, higher than the 8.4% of 2014.

LNG Canada CEO sees no scenario that would stop its

project

Bloomberg/Vancouver

The head of LNG Canada said he does “not see a single scenario” that would stop the nation’s largest infrastructure project from getting built, dispelling concerns that the $30bn gas export facility is at risk of mounting opposition from pipeline foes.

The liquefied natural gas project in northern British Columbia was approved by Royal Dutch Shell Plc and four Asian partners in October after obtaining the support of the province and 20 First Nation groups. But it continues to face a legal challenge disputing the constitutionality of the project’s approval, as well as protests by a group of indigenous holdouts.

“I do not see a single scenario that would cause the construction of this pipeline to be stopped,” Andy Calitz, LNG Canada’s chief executive officer, said in an interview in Vancouver.

TransCanada Corp is planning to build the pipeline that will carry the gas from western Canada’s prolific Montney shale formation to the coastal export facility in Kitimat. The whole

project – including the gas fields, pipeline and liquefaction terminal – fall within British Columbia and was authorised by the provincial regulator.

But a private citizen in Smithers, Michael Sawyer, mounted a legal challenge saying the pipeline is a federal undertaking and should have sought approval from the National Energy Board. The federal regulator agreed in December to consider the jurisdictional challenge and has requested evidence from the parties involved with final oral arguments set for March.

“It’s a complex world – the paths are not clear,” Calitz said. Any decision by the federal regulator could later be appealed in the courts. “But what I am clear about is that this pipeline, by the time that happens, will be in advanced construction.”

Separately, TransCanada is seeking to sell a stake in the pipeline project. That move was long contemplated and doesn’t indicate that there are growing concerns about the project’s risks, Calitz said.

“It has always been a part of the financing strategy for the project,” Calitz said. “It has no impact on either the construction or the capacity or any other aspect of the project.

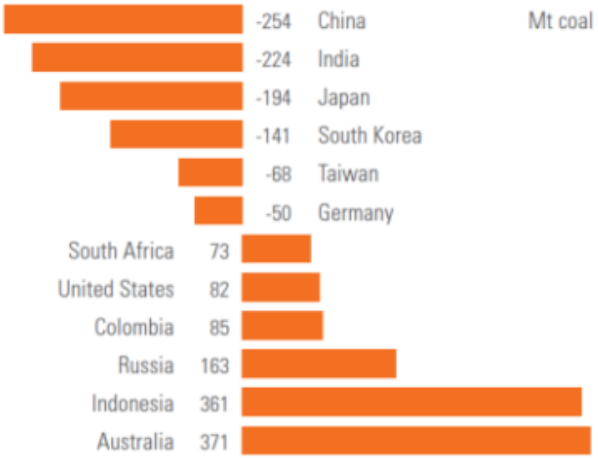
Transition: nation-by-nation review of race to phaseout coal

Table 1. Countries ranked by national coal consumption

Rank	Country	Coal & lignite consumption (Mtpa) *
1	China	3607
2	India	953
3	United States	649
4	Russia	232
5	Germany	222
6	Japan	196
7	South Africa	192
8	South Korea	136
9	Turkey	134
10	Poland	129
11	Australia	119
12	Indonesia	100
13	Kazakhstan	78
14	Taiwan	68
15	Czech Rep.	45

Source: Enerdata. **Includes metallurgic and thermal coal*

Figure 2. World's major coal importers and exporters in 2017 (all coal types)



Note: negative numbers represent net importers, positive numbers represent exporters

Source: Enerdata.

The transition from coal is gathering momentum

As of late 2018, 30 national governments, 22 sub-national governments and 28 businesses had committed to phase out coal by 2030, under the **Powering Past Coal Alliance**. Nonetheless, a common critique was that **these governments only accounted for about 3% of global coal consumption**. But, in the last few months, the transition from coal has started to get under way in the major coal-using economies.

Germany is the world's fourth biggest economy and **fifth largest consumer of coal**. Only **China**, **India**, **Indonesia** and **Russia** consume more coal per year than Germany. On January 26th, Germany's "coal commission"—a committee established by the Government and made up of coal sector stakeholders tasked to explore the terms for a fair and feasible German coal exit—came to a landmark compromise agreement on **a full exit from coal by 2035-2038** (full text in German here).

The German decision was followed by three other major events in the coal market

Firstly, **Glencore Xtrata**, the **4th largest commodities miner and biggest coal exporter in the world**, announced that it was **capping its coal output at 129Mt/yr** and would begin to diversify its assets away from coal as part of a new strategy to "enable the transition to a low-carbon economy".

Second, in **Australia**, which is the **world's biggest coal exporting country**, a very significant **court decision** was handed down in the state of **New South Wales**, which for the first time prevented a company from developing new mines because its investment was not considered consistent with the **Paris Agreement**.

Third, **China**, which **consumes half of global coal production and accounts for a similar share of global imports**(1), announced that it was going to **cap imports of metallurgical coal from Australia**, effectively blocking imports equivalent to about 10% of Australia's annual exports to China. This decision reflects a new normal in China, which is that its **domestic coal demand is now peaking, despite massive domestic production overcapacity**.

SOURCE: "Insights from case studies of major coal-consuming economies" – IDDRI

What does all this mean?

These events by themselves do not, of course, mean that suddenly the world is on track to phase out coal in the time needed achieve the Paris Agreement's goals. However, it

underscores the fact that, **globally, the "social licence" to keep investing in, trading and burning coal is fading fast**. This means that, as existing coal plants and mines expire, it is increasingly unlikely that new investments will be in coal. This has major implications for countries, sub-national governments, companies, local communities, and workers that are currently dependent on coal—they need to start urgently preparing and planning for the future beyond coal, before events overwhelm them.

A Just Transition

Secondly, the German coal exit decision highlights the central importance of **an inclusive and just transition for all citizens** as the condition sine qua non for phasing out fossil fuels. Germany's coal exit compromise is not just a phase-out schedule. **It puts workers, affected coal mining regions and affected power consumers at the heart of the strategy**. For instance, it includes agreement to ensure that every single worker currently in the coal sector will have the opportunity, if not retiring, to find alternative and equivalent quality employment. It also includes agreement on funding for regions to develop alternative economic activities, building on existing initiatives, such as **Lausitzlab**. A key lesson from Germany's agreement is that the transition from fossil fuels cannot succeed unless it is based on a high degree of stakeholder consensus and offers a desirable, post-coal future to the most vulnerable in society.

Economic common sense

A third take away from all this news is that the **technological alternatives to coal are much more advanced that they were even 5 years ago**. This allows other countries who are planning or contemplating new coal plants to think again. Once it was argued that wind and solar were too expensive and variable.

But costs, both of production and small scale storage solutions, have fallen massively in the last 5 years. Experience with integration of variable renewables in the **OECD** is showing that solutions exist to enable much higher shares than previously thought. The proof is that major industrialised economies like Germany are phasing out coal—while also phasing out nuclear power—in favour of very high goals for renewables; and that China is capping coal consumption in absolute terms. These are industrial powerhouse countries who would not do this if it put their economic model in jeopardy.

This conclusion dovetails with a recent **IEA** analysis, which argued that, for the world's population without access to electricity, **70% of new connections by 2030 could be done more cheaply or at equivalent cost via renewables or renewables plus small scale battery solutions**. With the right policy frameworks, political will and finance, developing countries can industrialise, provide affordable, universal power access and exit from coal.

SOURCE: IEA

In other places, the conversation on the decline of coal is also picking up. At the end of February, for example, an International Roundtable on the Future of Coal was held in **South Africa** (**a top 4 coal exporter**) back to back with a Symposium on a Just Coal Transition for South Africa.

What needs to happen now?

Nonetheless, much remains to be done. While the world on aggregate is moving away from coal, specific countries, such as **Japan**, **India**, **Vietnam**, **Indonesia**, **Mongolia**, **Turkey**, **Banglad esh**, **Pakistan**, **South Korea** and some parts of **Africa** are **still building new coal plants**. Policymakers in many developing

countries are keen to support industrialisation. In this context, **they are often offered coal energy investment packages—often by Chinese SOEs—containing cheap finance, technology, construction, skills transfer, and the promise of "cradle-to-grave" services**. These packages tend to outcompete renewables in the current market, even though alternatives to coal could be just as cheap, fast to build and reliable under the right (but missing) policy conditions. But thus far, high climate ambition countries and multi-lateral development banks have not yet been able to work with recipient countries to provide a sufficiently attractive alternative, at the scale required, to crowd out new coal.

Meanwhile, major coal users need to up their efforts to phase down coal. **China** has capped coal use, but now needs to begin planning a progressive phasing down of its coal assets over the coming decade. **India** needs to set a peaking date for coal use, like China has done, and do more to improve the investment environment and market integration policies for renewables and alternative fuel use to coal in industry. **South Africa** needs to find a way to make the most of its current power generation crisis: it needs to avoid a contentious debate over privatisation and instead focus on using the bailout of bankrupt state power monopoly **Eskom** onto a pathway out of coal and into cheaper renewable alternatives. Other major exporting countries like **Australia**, **South Africa** or **Colombia**, and key coal states of the **USA**, are still grappling with a fast changing reality. In general, **policymakers in these countries have not yet fully grasped the economic and social risks associated with continuing to assume that the future will be like the past**.

SOURCE: "Insights from case studies of major coal-consuming economies"

Most of all, however, workers, citizens, and other

stakeholders and their governments need to come together to agree on a strategy for the transition out of coal, oil and gas in line with the goals of the Paris Agreement on climate. Anything less leaves them open to a transition that is speeding up and could quickly get ahead of them, leaving it too late to catch up.

(1) For more information on the global coal market, and more specifically on major coal-consuming countries, read the report “Implementing Coal Transition – Insights from case studies of major coal-consuming economies – Pathways to “below 2°C”-compatible coal transitions in major coal-consuming economies” published in September 2018 by IDDRI and its partners within the framework of the project Coal Transitions: Research and Dialogue on the Future of Coal.

LNG Investment Needed As Oversupply Turns To Shortfall

Gas is the future. Among the reasons oil companies are latching onto gas as the energy transition looms are that it's plentiful, future demand growth outstrips oil and it has relatively low carbon intensity. Amidst all this, the liquefied natural gas (LNG) market is set to flourish. Yet prices today are collapsing. I turned to Massimo Di-Odoardo, Head of Global Gas Research, at Wood Mackenzie to make sense of what's going on.

Will low prices boost demand?

They help. At current spot prices, gas-to-power is competitive against coal, though we're not actually seeing much switching. In Europe, gas prices need to go below U.S.$3.5/mm Btu to displace efficient coal in Germany; whereas in Asia, lack of competition gives utilities little incentive to switch. The outlook though for LNG demand growth globally is bullish, driven by policy (such as clean air and the energy transition) and, in Europe, declining indigenous gas production. Competitive gas prices will help things along.

Are we seeing changes in LNG contract pricing?

Yes. We've seen Henry Hub-based contracts disrupt the market this decade because U.S. gas is cheap. But when LNG spot prices are low, Henry Hub-linked contracts are out of the money – not good. To be competitive as consumer markets open, buyers are looking for more innovative pricing. At LNG2019 in Shanghai, Tellurian Marketing announced a heads of agreement with Total, indexed to Asian LNG spot (JKM). Separately, Shell announced an agreement with Tokyo Gas, linked to coal prices – aimed squarely at LNG competing with new-build coal plants. We'll see a lot more creative pricing as buyers and sellers struggle/fight/work/try to stay competitive.

When will prices start to recover?

Prices will double inside three years. Supply additions slow dramatically from 2021, then a yawning gap opens for new

volumes post-2023. Some new projects need upward of U.S.$7/mm Btu to break even. The lead time for new LNG supply is about five years on average from final investment decision (FID) to commissioning so investors need to start building. LNG Canada (Shell), Tortue (BP) and Golden Pass (ExxonMobil/Qatar Petroleum) got the green light in the last few months. A host more FIDs are coming that will lift total investment in new projects to over U.S.$200 billion, and bring over 100 million tonnes per annum (tpa) of new LNG supply to the market by the mid-2020s.

So investors in new LNG projects should hold their nerve?

Yes, the market's going to need the gas. The projects just need to deliver on time and on budget. The lowest-cost producers will be the winners, resilient in any market conditions.

https://www.forbes.com/sites/woodmackenzie/2019/04/12/lng-investment-needed-as-oversupply-turns-to-shortfall/amp/?__twitter_impression=true

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Russia eyes greater energy dominance as Novatek taps Arctic

Bloomberg Moscow/London

Almost 1,500 miles from Moscow, the tiny port of Sabetta nestles in a desolate Russian Arctic peninsula. A former outpost for Soviet geologists, it’s now the site of Russia’s most ambitious liquefied natural gas project, operated by a company that only entered the market just over a year ago.

Several times a week, a giant tanker leaves this remote place carrying the super-chilled fuel to buyers in Europe and Asia. It’s not the only LNG plant beyond the Arctic Circle, but it’s by far the largest.

Novatek PJSC, the main shareholder of the Yamal LNG plant, says plans for further projects will transform Russia into one of the biggest exporters of the fuel within a decade. Already the world’s top exporter of pipeline gas and second-biggest shipper of crude oil, exports from Sabetta are giving Russia another conduit into the world economy for the country’s unrivalled energy resources.

“Russia can be in the top four main LNG exporters,” Novatek’s chief financial officer Mark Gyetvay said in an interview in London.

Novatek has demonstrated that it’s possible to produce and liquefy the fuel in such harsh conditions at competitive

prices and ship it to markets thousands of miles away in Europe and Asia. That's helped by receding Arctic ice which is allowing a specially built fleet of strengthened tankers to ship fuel along Russia's northern coast.

President Vladimir Putin has been a long-standing supporter of developing oil and gas resources locked under the region's permafrost. When opening the first production train of the Yamal LNG project in late 2017, Putin said the region gives Russia the opportunity to take up the fuel's "niche it deserves."

"We can boldly say that in this century and the next, Russia will expand thanks to the Arctic," he said at that time.

Novatek, whose biggest shareholders include Russian billionaires Leonid Mikhelson and Gennady Timchenko, as well as French energy giant Total SA, became Russia's top LNG producer after starting up its plant in the Yamal peninsula almost two years ago. The facility reached its full capacity at the end of 2018, ahead of schedule, doubling Russia's share of the global LNG market to 8%.

The gas producer has aggressive plans to command a 10th of the global market by 2030, Gyetvay said, and position Russia as one of the world's largest exporters alongside the US, Qatar and Australia.

All three of Yamal LNG's production units, with a combined actual capacity of 17.5mn tonnes a year, are now online. Novatek is attracting partners for a second plant, the so-called Arctic LNG 2 project, which is expected to come online in 2022.

The company is also considering commissioning a third facility and may increase its LNG production target for 2030 by about 20%, to as much as 70mn tonnes a year.

Novatek's resource base at two Arctic peninsulas – Yamal and Gydan – allows the company to raise production volumes to as much as 140mn tonnes a year in future, according to its chief executive officer Mikhelson.

Russia, the world's largest gas exporter, has been slow to join the global LNG boom as it has focused investment on

pipeline supplies to Europe. Until recently, the country had just one liquefaction project in operation, the Gazprom PJSC-led Sakhalin 2 project near Japan with an annual capacity of about 10mn tonnes.

The country has now taken an interest in the market for tanker-borne fuel amid growing global LNG demand and more difficult relations with its customers in the European Union.

Russia's Energy Ministry pegs total gas in place within the region at about 210tn cubic meters, or over 70% of the nation's total. Novatek's Arctic gas reserves are "conservatively" estimated at about 3.3tn cubic meters, Gyetvay said.

"We believe that Russia could be the fourth or even the third" biggest holder of LNG production capacity, said Karen Kostanian, Moscow-based oil and gas analyst for Bank of America Merrill Lynch.

https://www.gulf-times.com/story/628789/Russia-eyes-greater-energy-dominance-as-Novatek-ta

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Putin Keeps Options Open on Possible Extension of OPEC+ Oil Cuts

President Vladimir Putin kept his options open on whether to extend Russia's joint oil-production cuts with OPEC beyond June, saying he wanted to continue cooperation with the group but also highlighting the many uncertainties in the market.

Russia is comfortable with current oil prices, which rose to a four-month high above $70 a barrel in London on Monday, Putin said at the International Arctic Forum in St. Petersburg on Tuesday. The president also said he doesn't support an "uncontrollable" increase in the cost of crude that could hurt his country's other industries.

"We'll coordinate with OPEC and take a decision depending on the market situation," at the next meeting in June, Putin said.

Russia, one of the architects of the deal between the Organization of Petroleum Exporting Countries and its partners, has taken a wait-and-see approach on whether to extend the cuts. The political situation in Venezuela, Libya and Iran will need to be considered before a decision is

taken, Putin said. Saudi Arabia, which has cut output more than agreed, doesn't plan to deepen its curbs as the markets are "healthy."

"Of course, we are closely monitoring the market together with our partners, first of all, with the main oil producers, Saudi Arabia and countries of the Persian Gulf," Putin said.

Venezuela, Iran

U.S. sanctions have eliminated a significant volume of oil exports from Venezuela and Iran, helping drive up the price of international benchmark Brent crude by more than 30 percent this year. Meanwhile, Libya's output has been frequently disrupted as armed factions battle for political supremacy.

The Russian president also highlighted the possibility that any of those countries could become a bearish influence on prices. If the U.S. were to seize Venezuelan crude and sell it on the global market, or decide to loosen sanctions on Iran to foster a political compromise, inventories could start to increase again, Putin said. The situation in Libya could also normalize, allowing the country to boost exports, he said.

Russia will also take into account its domestic oil companies' plans while deciding on the future of the OPEC+ deal, Putin said.

"We understand that output shouldn't stop, investment should come into the sector, otherwise that also may create problems both for us and global energy," Putin said.

https://www.bloomberg.com/news/articles/2019-04-09/putin-keeps-options-open-on-possible-extension-of-opec-oil-cuts

Big Oil haunted by cost risks as $144bn LNG tab looms

Bloomberg/ Singapore

The world’s biggest energy companies are finally ready to invest in new gas export projects. Now they just need to figure out who will build them, and for how much.

After four years of belt-tightening, oil and gas firms are expected to start spending again, with as much as $144bn of investments in new liquefied natural gas developments in line to be approved by the end of this year. Meanwhile, the engineering, procurement and construction sector that erects these projects has been weakened by the cost-cutting, with shrinking order books and solvency questions.

While the order binge could provide a lifeline to EPC companies, it may see too many projects chasing too few builders, increasing risks for energy firms seeking to keep costs under control. In the last LNG building boom, for instance, projects in Australia alone went over budget by a combined $40bn.

“We have a new wave of LNG projects coming and a decimated

construction sector," said Saul Kavonic, an energy analyst at Credit Suisse Group AG. "There's real risk as we go into this next wave that engineering and construction constraints mean a return of project delays and cost inflation."

Natural gas is core to future growth for energy giants, with consumption seen growing faster than oil and coal as policies shift toward lower carbon emissions. Royal Dutch Shell Plc and Exxon Mobil Corp have in the past six months sanctioned new LNG plants in Canada and Texas, the first final investment decisions since 2015 for onshore greenfield projects. The amount of new production capacity investments this year could set a record, according to Wood Mackenzie Ltd.

That's welcome news to oil and gas EPC companies, which have seen their order books dry up since the oil price crash in 2014. Six of the top publicly traded firms had a combined backlog of more than $120bn in 2014. That fell to about $66bn last year, according to filings from the companies, which now number five after an acquisition.

"The market has gone through a shake-up," said Peter Coleman, chief executive officer of Australia's Woodside Petroleum Ltd, which is planning an expansion at its Pluto LNG project. "Some people are still in balance sheet repair, and it hasn't finished yet. We are watching that very closely."

The sharpest pain is being felt by Chiyoda Corp and McDermott International Inc, which have suffered from cost overruns related to their work on the Cameron LNG project in Louisiana. Chiyoda in February requested financial aid from Mitsubishi Corp, its largest shareholder, and the company plans to be more selective when choosing future LNG projects and joint venture partners, Tomoyuki Tsukamoto, head of investor relations at Chiyoda, said by phone. McDermott declined to comment.

"We have to recognise that our workforce and our capacity are limited," Tsukamoto said. "We have to select the most appropriate projects for us."

A weaker construction sector will be good for the remaining EPC companies, as they'll have more leverage when it comes to

negotiating, said Kavonic. That will mark a reversal from the past few years, when spending cutbacks forced service and construction firms to slash margins and take on more risk to win a limited number of jobs.

While construction companies have worked to lower costs for customers, some energy firms anticipated those numbers would keep dropping, Bechtel Group Inc LNG General Manager Darren Mort said in a phone interview. As projects get closer to final investment decisions, companies are reining in those expectations for more appropriate pricing levels, he said.

“Some of the aggressive numbers don’t seem to be getting the traction that they thought they would,” Mort said. “If they really had some reality to them, we’d be seeing FIDs on that basis.”

San Francisco-based Bechtel is privately held, so its financial data aren’t as accessible as some competitors. The firm has avoided any recent high-profile construction problems and Mort said its finances and capabilities remain strong.

The earlier a company is able to start construction, the less chance that firms push for higher rates, Credit Suisse’s Kavonic said. Shell’s decision to go ahead with LNG Canada in October means the project, which will be built by Fluor Corp and JGC Corp, could be more competitive globally by missing any cost inflation, he said.“The faster projects FID, the better rates they’ll get from the EPC contractors,” said Fauziah Marzuki, an analyst with BloombergNEF in Singapore. “Once the contractors realise they’ll be a bit stretched, they’ll start to factor in bigger contingency costs and margins.

https://www.gulf-times.com/story/628787/Big-Oil-haunted-by-cost-risks-as-144bn-LNG-tab-loo